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ABSTRACT

Touch is an important and powerful form of communication that is often avoided for fear of negative interpretations. However touch has also been associated with positive relational and educational outcomes. In this study, descriptions of touch, elicited from students, that occurred between teachers and students were sorted using S.E. Jones' (1994) categories of touch. Additionally, accompanying nonverbal behaviors were examined, and the relational messages (J.K. Burgoon & J.L. Hale, 1987) and attitudes toward the teacher and course associated with the different types of touch were examined. Most touches were categorized as positive touches using Jones' typology, however not all of these touches were interpreted as positive by students. Control touches were found to have more negative relational messages. Contains 35 references and 4 tables of data; an appendix describes Jones' categories of touch. (Author/RS)

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Differentiating Comfortable from Uncomfortable Teacher-Student Touches II: Hugs, Hits, and Handshakes

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Abstract

Touch is an important and powerful form of communication that is often avoided for fear of negative interpretations. However touch has also been associated with positive relational and educational outcomes. In this study, descriptions of touch, elicited from students, that occurred between teachers and students were sorted using Jones' (1994) categories of touch. Additionally, accompanying nonverbal behaviors were examined, and the relational messages (Burgoon & Hale, 1987) and attitudes toward the teacher and course associated with the different types of touch were examined. Most touches were categorized as positive touches using Jones' typology, however not all of these touches were interpreted as positive by students. Control touches were found to have more negative relational messages.

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Touch is an important aspect of communication that can be used to communicate both positive messages (e.g., love and affection) as well as negative messages (e.g., anger and control). Both discussions with colleagues and research (Booth-Butterfield, 1989; Mongeau & Blalock, 1994) have identified confusion about a teacher initiating touch when interacting with students. Is it OK to touch students or is it something that should be avoided altogether? This is a complex question since touch has so many possible interpretations (e.g., Jones, 1994). As a consequence, the primary goal of this research was to gain a better understanding of the relational consequences of teachers touching students.

Touch is a powerful form of communication (Richmond & McCroskey, 1995) because of the intensity of feelings that it can communicate. Touch is such a controversial form of communication because of this power. Touch is associated with a variety of personal and relational outcomes. Touch has been associated with positive relational outcomes such as immediacy (Mehrabian, 1971, 1981). Immediacy is defined as perceived physical and/or psychological closeness (Richmond, Gorham, & McCroskey, 1987) and is considered a distinct theme or characteristic of relational communication (Burgoon & Hale, 1984). However touch has also been associated with sexual harassment (Booth-Butterfield, 1989; Mongeau & Blalock, 1993). Touches interpreted as groping, grabbing, or that are forced, such as a forced hug or kiss are considered to be sexually harassing. With touch being associated with both positive and negative outcomes, it is easy to become confused about how to conduct oneself in certain situations. In some business settings, individuals are directed to "not touch each other" in order to avoid the appearance of sexual harassment (Dykinga, 1995). But is this really good advice?

Although most interactions can be carried out successfully without touch, many interactions may be more successful when touch is used. Steward and Lupfer (1987) conducted an experiment where students met with their instructor to discuss their performance on an exam and their general progress in the course. Half of the students were touched twice on the arm by the instructor during the conference. Those students who were touched by the instructor rated their instructor as friendlier, more understanding, interesting, and capable than did those students who were not touched during the conference. More importantly, those students who were touched by their instructors performed significantly better on the next exam than did those students who were not touched. The results of this study clearly indicate that touch may help teachers achieve their classroom goal of facilitating learning.

Steward and Lupfer's results are consistent with research on immediacy. Although touch is only one component of immediacy, immediacy has consistently been associated with positive outcomes such as affective learning (Anderson, 1979; Christophel, 1990; Richmond, et al., 1987), cognitive learning (Comstock, Rowell, & Bowers, 1995; Kelly & Gorham, 1988), and motivation to study (Christophel, 1990; Frymier, 1993, 1994). Touch that enhances immediacy would be expected to have positive effects on students' learning and motivation in the classroom. While touch can certainly have some very beneficial outcomes, touch can also have negative consequences such as sexual harassment.

Sexual harassment can be defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature (Equal Employment Opportunity Commission, 1980; Fitzgerald, 1990). Touch is one of many behaviors that can be sexually harassing (Booth-Butterfield, 1989; Mongeau & Blalock, 1993). Academic sexual harassment generates exclusively negative outcomes for harassees. Harassees tend to question their own academic ability; tend to avoid talking to, or taking another class from, the harassing instructor; report lower or failing grades; and change their major or school (Adams, Kottke, & Padgitt, 1983; Benson & Thomson, 1982; Cammaert, 1985; Schneider, 1987).

Although there has been a good deal of research conducted on touch (Burgoon, 1991; Burgoon, Buller, Hale, & deTurck, 1984; Burgoon & Walther, 1990; Burgoon, Walther, & Baesler, 1992; Jones & Yarbrough, 1985; Jourard & Rubin, 1968; Montagu, 1986; Rosenfeld, Kartus, & Ray, 1976), there is still a great deal about touch that is not understood. One issue that complicates the study of touch is that touch does not occur in a vacuum. Touch is a form of communication that is used in conjunction with other forms of communication, both verbal and nonverbal. For instance, Burgoon and Walther (1990) found that a touch to the face was interpreted differently depending on the attractiveness of the communicator. Although some touches do have a fairly stable meaning (i.e., a handshake) (Burgoon & Walther, 1990), the meaning conveyed by most touches varies depending on the context, relationship, topic of conversation, and other verbal and nonverbal behaviors accompanying the touch.

To explore the meanings communicated by touch, Jones and Yarbrough (1985) looked at the touches that were associated with different types of meaning. Using participant observers, Jones & Yarbrough collected information on 1500 touches, and identified 18 categories of meaning. Jones and Yarbrough were able to identify key features of touches that conveyed each meaning, but one clear result was that a particular type of touch could communicate different

meanings. For example, a kiss could communicate appreciation, affection, sexual interest, playful affection, greeting with affection, or departure with affection (Jones & Yarbrough, 1985, p. 30).

Jones (1994) slightly modified the Jones and Yarbrough (1985) typology of meanings, identifying eight categories of touch meanings. These categories are: Positive Touches which includes support, appreciation, togetherness, and affection; Sexual Touches which includes this type only; Playful Touches which includes playful affection and playful aggression; Control Touches which includes compliance, attention-getting, and announcing-a-response; Ritual Touches which includes simple greeting and simple departure; Hybrid Touches which includes greeting with affection and departure with affection; Task-Related Touches which includes reference-to-appearance, incidental, and instrumental; and Accidental Touches which includes this type only. Descriptions of these different types of touches are further described in the Appendix.

These categories of touch developed by Jones and Yarbrough (1985) and revised by Jones (1994) describe different interpretations of touch rather than the nature of the touches themselves. In other words, this typology does not specify that a touch on the forearm is positive while taking hold of the elbow is controlling. Research indicates that the

body part touched in a teacher-student interaction does not determine how a touch is interpreted. Mongeau and Frymier (1994) report no differences between comfortable and uncomfortable touches in regard to what body part was touched and conclude that "comfortable and uncomfortable touches differed in their interpretations rather than in the nature of the touches themselves" (p. 24). However, a majority of the touches studied by Mongeau and Frymier involved "safe" areas of the body such as arms and upper back. The context factors examined by Mongeau and Frymier (i.e., where the interaction occurred and how many other people were around) were not useful in differentiating comfortable from uncomfortable touch. What makes a touch comfortable or pleasant rather than uncomfortable or unpleasant still is not understood, and it is this issue that drives the present research.

In the present research we seek to better understand the differences between comfortable and uncomfortable touch between teachers and students. Rather than focusing on context we chose to focus on the nature of the touch and other nonverbal behaviors that accompanied the touch. Jones' (1994) eight categories of touches provided a framework for examining the nature of teacher-student touch.

The first question posited in this research is to consider whether pleasant touches are primarily of a certain type(s)

while unpleasant touches are primarily of another type(s). For instance, might pleasant touches occurring in the teacher-student relationship be primarily positive touches as defined by Jones (1994) and unpleasant touches be primarily control touches? With the goal of understanding the differences between positive and negative touch occurring in teacher-student relationships, we put forth these first two research questions:

RQ1: What type of touches occur between students and teachers?

RQ2: What type of touches were reported as pleasant and what type of touches were reported as unpleasant?

Heslin and Alper (1983) discussed several factors that influence how touch is interpreted. Three of these are fairly concrete variables: duration, pressure, and movement of a touch. Although Heslin and Alper speculate that these factors influence the interpretation of touch, they do not indicate how interpretations would be influenced. We believed duration, pressure, and movement of touch may help distinguish between pleasant and unpleasant touches. Therefore, we put forth the following two-part research question.

RQ3a: How do the types of touch differ in duration, pressure, and movement?

RQ3b: How do pleasant and unpleasant touches differ in duration, pressure, and movement?

While the nature of the touch is expected to influence how the touch is interpreted, other nonverbal behaviors accompanying the touch are also likely to influence interpretation of the touch. This is consistent with Jones and Yarbrough (1985) findings. They found the same touch behaviors communicated different meanings depending on the other communication behaviors that accompanied the touch as well as other variables such as the nature of the existing relationship. Two nonverbal behaviors that may influence the interpretation of touch are eye contact and body orientation. Eye contact, which is an immediacy behavior, communicates interest and liking. A touch that is accompanied by eye contact would communicate greater immediacy than a touch not accompanied by eye contact. Direct body orientation is also an immediacy behavior which communicates interest. A touch combined with direct body orientation would communicate greater immediacy than a touch with indirect body orientation. A touch that is accompanied by both eye contact and direct body orientation may communicate such a high level of affiliation that it would be considered inappropriate for the student-teacher relationship and result in a more negative interpretation of the touch. This leads us to the following hypothesis.

H1: Touches accompanied by both eye contact and direct body orientation will be associated with more negative relational messages and reactions to the touch than will touches not accompanied by eye contact and direct body orientation.

Another question driving the present research is "What is the impact of touch on the student-teacher relationship?" One way of addressing this question is to explore the relational message interpretation associated with different types of touch. A second way of addressing this question is to explore the relationship between the types of touch and affective learning (i.e., attitude toward the instructor and class). This led us to the following two research questions:

RQ4: Do the types of touch differ in the relational messages communicated?

RQ5: How did different types of touches affect participants' attitude toward their instructors and toward the course content (i.e., affective learning)?

METHOD

Procedures

Participants were randomly assigned to one of two conditions. Half of the participants were asked to recall and describe an interaction between themselves and a teacher that involved touch and was unpleasant and uncomfortable. The other half of the participants were asked to recall and describe a pleasant and comfortable interaction with a teacher that involved touch. Several examples of touches (shaking hands, hugging, pat on the back, brushing up against, slapping, etc.) were listed to prime participants' memories. Participants were asked to do the following when describing the interaction: 1) describe the context within which the touch occurred; 2) describe how and why the touch occurred; 3) describe how they reacted to the touch; and 4) describe the impact this interaction had on their relationship with their instructor (if any). After providing a written description of the interaction, participants responded to a variety of questions about the interaction and completed additional scales.[1] Participants who were unable to recall an interaction that involved touch were asked to complete the two affective learning scales, but not the other scales. Most students (78%), were able to recall an interaction involving touch.

Participants

Participants consisted of 232 (127 female, 103 male, and 2 unidentified) undergraduate students enrolled in one of two introductory communication courses at a medium sized Midwestern university. There were 180 participants who recalled and described a touch. Data analysis was limited to these participants. Participants reported on 124 male, 53 female teachers, and three unidentified. The average age of participants when the interaction on which they were reporting

took place was 17.27. The average age of participants at the time of the study was 20 years.

Measurement

Student Reaction. Students response to the touch was assessed using three 5-interval Likert-type items. These items were created specifically for this study and were intended to measure students' reaction to the touch. The items were: "The touch bothered me," "The touch made me feel good," and "I felt awkward while the instructor touched me." The scale had good reliability and face validity. See Table 1 for the mean, standard deviation, and reliability of the reaction scale.

Relational Message Scale. Burgoon and Hale's (1987) Relational Message Scale was used to assess participants' perceptions of what the instructor was trying to communicate with the touch. The 40-item version of Relational Message Scale, using 5-interval Likert-type scales, was chosen for this study. This version of the Relational Message Scale consists of eight dimensions: immediacy-affection, similarity-depth, receptivity-trust, composure, formality, dominance, equality, and task-social. Burgoon and Hale (1987) report reliabilities for each dimension ranging from .52 (equality) to .81 (immediacy-affection). See Table 1 for scale means, standard deviations, and reliabilities in the present study.

Duration, Pressure, and Movement. These three dimensions of touch were measured using eleven 7-interval bi-polar adjectives written for this study. The adjective pairs used to measure duration were long/short, brief/extended, short-lived/drawn out, and lingering/swift. Duration had a M=3.05, a SD=1.51, and an alpha reliability of .91. The adjective pairs used to measure pressure were soft/hard, heavy/light, harsh/mild, and gentle/rough. Pressure had a M=3.22, a SD=1.39, and an alpha reliability of .90. The adjective pairs used to measure movement were motionless/moving, stationary/mobile, and active/passive. Movement had a M=3.96, a SD=1.55, and an alpha reliability of .79. High scores indicate long, hard, and moving touches.

Eye Contact. Eye contact was measured with one item with five options designed for this study. Participants were asked to check each option that applied to the touch that they were reporting. The options were: "We looked each other in the eye," "We looked at each other, but not in the eye," "The instructor looked at me, but I didn't look at them," "I looked at the instructor, but s/he didn't look at me," and "We were both looking at something else." The responses to this item were dichotomized. The first and second options were combined to create an "eye contact" level (n=85), and the third, fourth, and fifth items were combined to create a "no eye contact" level (n=94).

Body Orientation. Body orientation was measured with one item with six options that were designed for this

study. Participants were asked to check each option that applied to the touch on which they were reporting. The six options were: "The instructor was facing me and was directly in front of me," "The instructor was facing me and at my side," The instructor was facing me and was behind me," "The instructor was not facing me and was directly in front of me," "The instructor was not facing me and was at my side," and "The instructor was not facing me and was behind me." Again, the responses to this item were dichotomized. The first three options were combined to create a "direct orientation" level (n=142) and the last three items were combined to create an "indirect orientation" level (n=37).

Affective Learning. Two subscales from Gorham's (1988) Affective Learning Scale were used. Gorham's Affective Learning Scale consists of six subscales asking students about their (a) attitude toward course content, course recommended behaviors, and course instructor, and (b) behavioral intent to engage in behaviors recommended in the course, enroll in another course of related content, and take another class with the same instructor. The two subscales used in this study were students' attitude toward course content and toward the course instructor. These two dimensions of affective learning were measured using a 7-interval semantic differential scale with the adjectives good/bad, worthless/valuable, fair/unfair, and positive/negative. Previous reliabilities for the Affective Learning Scale and sub-scales have ranged from .96-.98. See Table 1 for the means, standard deviations, and reliabilities for these measures in the present study.

RESULTS

Manipulation Check

To determine if the comfortable touches were significantly different from the uncomfortable touches, analysis of variance was used. An ANOVA with students reaction to the touch serving as the dependent variable and comfortable/uncomfortable touch serving as the independent variable was performed. Results [F (1/182) = 99.27, h^2 = .35, $p < .001$] indicated that students reporting a comfortable touch had a significantly more positive reaction (M = 4.00, SD=.81) than did the students reporting an uncomfortable touch (M = 2.58, SD = 1.12). Students' reactions to comfortable touches were quite positive (a score of 5 is the maximum), while students' reactions to uncomfortable touches was close to neutral.

Research Questions and Hypotheses

To address the first research question regarding the types of touches that occur between teachers and students, content analysis was used. Participants' descriptions of the interactions involving touch between themselves and a teacher were transcribed and placed on separate cards. Jones' (1994)

categories of touch were used for sorting the descriptions and determining what types of touches occurred between teachers and students. Two independent coders read each description and determined which of Jones' (1994) eight types of touch the description best fit. Intercoder agreement for the eight categories using Cohen's (1960) kappa coefficient of agreement was .68. Most disagreements occurred between the positive touch category and the task-related category. This was largely due to the vagueness and incomplete nature of many of the participant descriptions. The two coders reviewed and reached agreement on each description for final categorization. See Table 2 for the number of touches that occurred in each category.

As is shown in Table 2, most touches fell into the category of positive touches (n=78). Jones (1994) defines positive touches as communicating support, appreciation, togetherness, or affection. Most of the descriptions could be classified as either affection or support, and none appeared to fit the togetherness type. Two typical examples of positive touches described by participants are as follows:

> I was in class after school sitting at my desk, asking my teacher (a male) to help me with some problems (concerning the class). As he was helping me he put his hand on my shoulder and after I shook his hand in thanks.

> I was at an awards ceremony as a senior in high school being honored for my achievement in music. After I received a major award my band director hugged me, congratulated me, and patted me on the back.

The second largest category of touches was hybrid touches (n=26). These touches involve greetings and departures with affection. Interactions involving these touches included more than a simple handshake. These touches typically involved some form of hugging and the participant described the interaction as warm.

Task-related touches were the third largest category with 24 touches. Jones (1994) defines this category of consisting of incidental, instrumental, and reference to appearance touches. Touches in this category best fit with the incidental and instrumental types. Incidental touches occur as an unnecessary part of performing a task, where instrumental touches occur in accomplishing a task. Two typical examples of task-related touches are as follows:

> One of my math teachers liked to rub my back. He would do this in class when he would be checking on the classes' work.

> My physical therapy class instructor (opposite sex) used my body to demonstrate several physical therapy motions.

Touch Type and Interpretation

A few touches also fell into the categories of sexual and playful touch (three and four respectively). These types of touches appear to be the exception in teacher student interactions. These touches were excluded in the analyses performed to address research questions two, three, and four due to their low frequency. Also to facilitate analyses, the ritual touch and hybrid touch categories were combined. These two categories were combined because of their similarity (all touches involved greetings or departures) and to create a larger sample size for this cell for statistical analyses. This resulted in four categories of touch: positive touches, control touches, ritual/hybrid touches, and task-related touches. (No touches were categorized as accidental, therefore this category was not used.) There were 149 descriptions of touches that were coded and used in the following analyses.

To address the second research question, the frequency of touches elicited as pleasant and unpleasant in each category of touch were examined (see Table 3). As indicated above, participants were asked to think of either a pleasant and comfortable touch or an unpleasant and uncomfortable touch. Of the 149 descriptions, 88 were elicited from participants in the pleasant group and 61 from participants in the unpleasant group. See Table 3 for frequencies.

Most positive touches were elicited from participants in the pleasant touch condition. One might expect virtually all of these touches to be considered pleasant, however over one-third were clearly intended to be positive, but were interpreted negatively by the student. An example of such a touch is illustrated by the following description.

> At an awards assembly, I was receiving the award. Teacher was very happy for me and hugged me. Didn't like it because of where we were. Didn't affect relationship after that day.

It appears that the student recognized the positive intent of the teacher's touch, but was still uncomfortable with the touch.

Touches in the ritual/hybrid category were also mostly considered pleasant. These touches frequently involved students and teachers who had developed a close relationship and who were either glad to see each other or sorry to see the other person leaving.

Control touches were almost all considered unpleasant. Having one's behavior directed and controlled is rarely a pleasant experience. Task-related touches were quite evenly distributed between the pleasant and unpleasant groups. This is not surprising. Task-related touches involve touches that are necessary to completing a task. A student may feel closer to his/her instructor as a result of such a touch, or feel resentful of being touched. This may be a result of the

student's feelings toward the instructor and relationship with the instructor prior to the touch.

Part "a" of the third research question asked how the types of touch differed in duration, pressure and movement. To answer this question, ANOVA was used with type of touch (positive, control, ritual, task) serving as the independent variable and duration, pressure, and movement serving as dependent variables in separate analyses. There were no significant differences in duration or movement found among the four types of touch. However, significant differences in pressure among the four types of touch were found [$\underline{F}$ (3/144) = 11.69, h^2 = .20, $\underline{p} < .001$]. T-tests using least square means were used to probe for specific differences (see Table 4). Pressure was greatest in control touches and lowest in ritual touches.

To address part b of the third research question, ANOVA was again used with pleasant vs. unpleasant touch serving as the independent variable and duration, pressure, and movement serving as dependent variables in separate analyses. No significant differences between pleasant and unpleasant touches were found for duration or movement. A significant difference was found for pressure [$\underline{F}$ (1/180) = 6.24, h^2 = .03, $p < .05$], with the pleasant group having a mean of 3.00 ($\underline{SD}$ = 1.23) and the unpleasant group having a mean of 3.51 ($\underline{SD}$ = 1.53). Unpleasant touches exhibited more pressure than pleasant touches.

Touch, Eye Contact and Body Orientation

Hypothesis one predicted that touches accompanied by eye contact and direct body orientation would be associated with more negative relational messages than would touches not accompanied by eye contact and direct body orientation. To test this hypothesis, three nonverbal behavior conditions were created: eye contact/direct orientation ($\underline{n}$=82), no eye contact/direct orientation (n=60), and no eye contact/indirect orientation ($\underline{n}$=34).[2] The nonverbal behavior conditions served as independent variables and the relational messages served as the dependent variable in a series of ANOVAs. There were no significant differences among the three conditions for immediacy-affection, receptivity-trust, similarity-depth, formality, equality, composure, dominance, or for task-social.

ANOVA was also used to determine if eye contact and direct body orientation would be associated with negative reactions by students to the touch. Students' reaction to the touch served as the dependent variable, while the three levels of eye contact and body orientation served as independent variables. There were significant differences among the three nonverbal behavior conditions [$\underline{F}$(2/175) = 11.97, $\underline{h}^2$ = .12, $\underline{p}$<.01]. The eye contact/direct orientation condition had a

more positive reaction (M=3.84, SD=.96) than did the no eye contact/direct orientation condition (M=3.08, SD=1.24) and the no eye contact/indirect orientation (M=2.90, SD=1.27). The latter two levels did not differ significantly from one another. This finding is the opposite of what was expected.

Touch and Relational Message Dimensions

The fourth research question asked how the different types of touches impact the relational message interpreted from the touch. Analysis of variance was used to address this question, with the categories of touch serving as the independent variables and each of the eight relational messages serving as dependent variables. Control touches communicated less immediacy-affection [$F(3/140) = 10.90$, $h^2 = .19$, $p < .01$], less receptivity-trust [$F(3/140) = 18.44$, $h^2 = .29$, $p < .01$], less similarity-depth [$F(3/142) = 18.80$, $h^2 = .29$, $p < .01$], less composure [$F(3/142) = 13.45$, $h^2 = .23$, $p < .01$], and less equality [$F(3/142) = 15.73$, $h^2 = .25$, $p < .01$], and more formality [$F(3/143) = 10.69$, $h^2 = .19$, $p < .01$] and dominance [$F(3/137) = 5.59$, $h^2 = .11$, $p < .01$] than did the other types of touch. Significant differences were also found for task-social relational message, but in a pattern different from the other relational messages [$F(3/139) = 8.30$, $h^2 = .15$, $p < .01$]. Ritual/hybrid touches were perceived as communicating less task orientation (more social) than positive, control, or task-related touches. See Table 4 for cell means and standard deviations.

The fifth research question was concerned with participants' attitudes toward the instructor on which they were reporting and the course they had with that instructor. Significant differences among the categories of touch were found for participants' attitude toward the teacher [$F(3/145) = 4.94$, $h^2 = .09$, $p < .05$]. Participants' who described ritual/hybrid touches reported having a more positive attitude toward their teacher than participants describing either a positive touch or a control touch. Analysis of variance indicated no significant differences among the four categories of touch concerning participants' attitude toward the course content. See Table 4 for the means associated with all analysis of variance.

DISCUSSION

The results of this study indicate that a variety of touches occur between teachers and students. Most of these touches were described as positive touches (Jones, 1994) and very few touches were used to communicate control, or were sexual in nature. Touch used in greeting and/or departure was also frequently described. There were several descriptions of touch occurring between a teacher and student where a friendship-like relationship had developed, making it

normal in either a greeting or a departure to complement the verbal message with some form of touch.

Seven of Jones' (1994) eight categories of touch were identified and were represented in descriptions of both pleasant and unpleasant touches. Over a third of touches classified as positive came from students reporting unpleasant and uncomfortable touches. This is a somewhat confusing result. It appears from this research, that students who experience an unpleasant touch can recognize the positive intention of the teacher's touch. This may be good news for instructors. Even if a touch is not particularly welcomed, students may still recognize a teacher's good intentions. Further support for this position is the results with affective learning. Affective learning was quite high regardless of the type of touch. In other words, students had a positive attitude toward the course content and toward the teacher across all types of touch.

As was expected, the category of touch influenced the perceived relational message in the interaction. Control touches consistently had more negative relational messages associated with them. The combined category of ritual/hybrid touches was consistently associated with more positive relational messages. The touch involved in greetings and departures (which makes up the ritual/hybrid category), is most likely mutually negotiated. It makes sense that touch that is mutually negotiated would be perceived more positively. We are more likely to interpret something positively if we are involved in initiating or defining it. Other categories of touch (e.g., control) involve more instances of touch that are initiated by the teacher, rather than mutually negotiated.

Hypothesis one predicted that the accompanying nonverbal behaviors of eye contact and body orientation would influence how a touch was interpreted. Eye contact and body orientation was not associated with different relational message interpretations. However the nonverbal behaviors did have an impact on participants' reaction to the touch, but not in the expected direction. We expected the eye contact/direct orientation level would have created too much closeness and would have been interpreted as inappropriate. However, the eye contact/direct orientation condition resulted in the most positive reaction. It appears that the combination of eye contact, direct body orientation and touch was interpreted as immediacy rather than as inappropriate intimacy. Richmond and McCroskey (1995) describe immediacy as being a point on a continuum between neutrality and intimacy. The point at which closeness moves from immediacy to intimacy is very gray indeed. The existing relationship between the teacher and student may have

facilitated these nonverbal behaviors being interpreted as immediacy rather than intimacy.

In regard to the impact touch had on students' attitude toward their teachers and toward the course, all types of touch resulted in fairly positive attitudes. There were no significant differences in attitude toward the course among the four types of touch. The only significant difference for attitude toward the teacher was between positive touches and ritual/hybrid touches. Examination of Table 4 shows that all of the means for teacher/course attitude were above the mid-point of 4 on the scale. Even control touches resulted in an overall positive attitude toward the instructor and toward the course. Although we do not have a control group with which to compare, these results indicate that teachers touching students result in fairly positive student responses. If we assume that the touch was interpreted as immediacy, this result is very consistent with previous research on immediacy. Nonverbal immediacy, in which touch is a component, has consistently been associated with affective learning (Christophel, 1990; Frymier, 1994; Richmond, et al., 1987).

As stated earlier in this paper, touch is a powerful form of communication. The message communicated through touch can certainly be a powerful negative message, but it can also be powerfully positive. Most people recognize the important role touch plays in the development of close friendships, romantic relationships, and family relationships. Based on the present research, it appears that touch also plays an important role in developing close professional relationships such as between teacher and student. Although this research did not examine other types of professional relationships (e.g., doctor-patient, superior-subordinate), touch is likely an important component in the development of close working relationships in other contexts as well.

Notes

[1]Data collected, but not reported here include: touch apprehension, touch avoidance, how the touch was labeled, and body part touched.

[2]The fourth possible level, eye contact and indirect orientation, was not included because it did not occur and it seems rather difficult to do.

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Table 1

Means, Standard Deviations, and Reliabilities for Scales

	Mean	SD	Reliability
Reaction to Touch	3.38	1.19	.90
Immediacy-Affection	3.69	.56	.78
Receptivity-Trust	3.86	.69	.82
Similarity-Depth	3.34	.72	.74
Composure	4.07	..65	.81
Formality	2.11	.77	.68
Dominance	2.70	.64	.63
Equality	3.62	.80	.73
Task-Social	3.22	.80	.73
Attitude toward Teacher	5.63	1.48	.93
Attitude toward Course	5.78	1.25	.91

Table 2

Categorization of Touch Descriptions

Positive Touches	78
Sexual Touches	3
Playful Touches	4
Control Touches	12
Ritual Touches	9
Hybrid Touches	26
Task-Related Touches	24
Accidental Touches	0
Unusable Descriptions	24

Table 3

Frequencies of Pleasant and Unpleasant Touches For Types of Touch

	Positive	*Control*	*Ritual/Hybrid*	*Task-Related*
Pleasant	51	2	24	11
Unpleasant	27	10	11	13

Table 4

Relational Message and Teacher/Course Attitude Means for Categories of Touch

	Positive Touches	*Control Touches*	*Ritual/Hybrid Touches*	*Task-Related Touches*
Duration	3.11 (1.45)	2.71 (1.53)	2.89 (1.34)	3.17 (1.30)
Pressure	3.18a (1.29)	5.25abc (2.01)	2.69b (1.09)	3.21c (1.17)
Movement	3.89 (1.49)	4.72 (1.84)	3.92 (1.27)	3.42 (1.71)
Imm-Aff	3.66a (.49)	2.87ab (.72)	3.96ac (.60)	3.66bc (.52)
Rec-Trust	3.88a (.58)	2.70ab (1.10)	4.12a (.47)	3.98b (.54)
Sim-Depth	3.32a (.57)	2.08ab (.85)	3.65ac (.62)	3.29bc (.67)
Composure	4.11a (.51)	3.15abc (.94)	4.29b (.57)	4.28c (.46)
Formality	2.11a (.70)	3.14abc (1.08)	1.86b (.60)	1.86c (.69)
Dominance	2.70a (.63)	3.15ab (.66)	2.33ac (.58)	2.69bc (.59)
Equality	3.62a (.75)	2.31abc (1.29)	3.92b (.56)	3.93c (.56)
Task-Social*	3.29a (.67)	3.67b (1.06)	2.78ab (.70)	3.68a (.80)
Teacher Att.	5.53a (1.60)	4.75b (1.99)	6.44ab (.92)	5.72 (1.36)
Course Att.	5.66a (1.39)	5.69 (1.47)	6.27a (.89)	5.86 (1.18)

Numbers inside parentheses are standard deviations.
Means that share the same subscript in a row are significantly different, $p < .05$.
*A higher score indicates a more task-related relational message, and a lower score indicates a more social relational message.

APPENDIX

Description of Jones' (1994) Categories of Touch

A. POSITIVE TOUCHES:

1. Support: serves to nurture, reassure, or promise protection.

2. Appreciation: expresses gratitude.

3. Togetherness: draws attention to act of being together; suggests psychological closeness.

4. Affection: expresses liking or loving.

B. SEXUAL TOUCHES:

1. (One main type): expresses physical attraction or sexual interest.

C. PLAYFUL TOUCHES:

1. Playful affection: lightens interaction by qualification of affection.

2. Playful aggression: lightens interaction by qualification of aggression.

D. CONTROL TOUCHES:

1. Compliance: attempts to direct behavior.

2. Attention-getting: directs other's perceptual focus.

3. Announcing-a-response: emphasizes a feeling of initiator; often implicitly requests similar response from the other.

E. RITUAL TOUCHES:

1. Simple greeting: part of act of acknowledging another at the opening of an encounter.

2. Simple departure: part of act of closing an encounter.

F. HYBRID TOUCHES (combination of meanings -- 2 most common below):

1. Greeting-with-affection: expresses affection at the initiation of an encounter.

2. Departure-with-affection: expresses affection at end of encounter.

G. TASK-RELATED TOUCHES:

1. Reference-to-appearance: a touch that points out or inspects a body part or artifact referred to in comment about another's appearance.

2. Incidental: a touch that occurs as an unnecessary part of the accomplishment of a task.

3. Instrumental: touch that accomplishes a task in itself.

H. ACCIDENTAL TOUCHES:

1. (One type only): touches that are usually perceived as unintentional.